

## **REMARKS**

### **Pending Claims:**

Claims 1-20, 22-27, 29-41, and 43-46 are currently pending in the present application. Claims 1, 3, 10, 12, 16, 22, 33, 43, and 44 are amended by the present Amendment. Claims 21, 28, and 42 are canceled without prejudice to Applicant's right to pursue these claims in this or a subsequent patent application. Claims 45 and 46 are added. No new matter is added by these amendments. Upon entry of the present Amendment, reconsideration of claims 1-20, 22-27, 29-41, 43, and 44 and consideration of new claims 45 and 46 is respectfully requested.

### **New Claims**

New dependent claims 45 and 46 recite that the power supply comprises the ionization source. The Applicant submits that new claims 45 and 46 are supported by the originally filed specification and that no new matter is added by these claims. See, for example, paragraph 35, which states that in one embodiment, the pulsed power supply 202 is a component in an ionization source that generates a weakly-ionized plasma 232.

### **Allowable Subject Matter**

The Applicant acknowledges with appreciation the Examiner's statement made in page 10 of the Office Action dated October 07, 2003 that claims 25, 27-30, 34, 38-40, and 42 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicant has amended independent claim 22 to include the limitation of dependent claim 28, which the Examiner has indicated is allowable. In addition, the Applicant has amended independent claim 33 to include the limitation of dependent claim 42, which the Examiner has also indicated is allowable. Therefore, the Applicant submits that independent claims 22 and 33 are now allowable as currently amended. In addition, the Applicant submits that dependent claims 25, 27, 29, 30, 34, and 38-40 are now allowable as depending from allowable base claims.

**Drawing Objections:**

The drawings are objected to under 37 C.F.R. §1.83(a). Claims 1, 3, 10, 12, and 43 have been amended to remove references to features not explicitly illustrated in the drawings. Therefore, the Applicant submits that the objections to the drawings are now moot.

**Rejections under 35 U.S.C. §112:**

Claims 1-21, and 43 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The Office Action states that these claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. The Applicant has amended independent claims 1 and 43 and dependent claims 3, 10, and 12 to remove limitations not explicitly disclosed in the specification. Therefore, the Applicant submits that claims 1-21 and 43 as currently amended overcome the rejections under 35 U.S.C. §112.

**Rejections under 35 U.S.C. §102(b) as Being Anticipated by Koloc:**

Claims 1, 2, 4-11, 19, 20, 22-24, 26, 31-33, 35-37, 41, 43, and 44 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,041,760 issued to Koloc (hereinafter "Koloc"). Independent claims 1, 10, 22, 33, 43, and 44 are herein amended to more clearly recite the invention. No new matter is added by these amendments.

To anticipate a claim under 35 U.S.C. §102, a single reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught by the reference must be inherently present in the reference. Thus, a claim is anticipated by a reference only if each and every element of the claim is described, either expressly or inherently, in a single prior art reference.

**Independent Claim 1 and Dependent Claims 2, 4-9, and 45**

The Applicant respectfully submits that Koloc does not describe each and every element of independent claim 1 as currently amended. Independent claim 1 has been amended to recite an ionization source that generates a weakly-ionized plasma from a feed gas where the weakly-

ionized plasma reduces the probability of developing an electrical breakdown condition in the chamber. This amendment to claim 1 is supported by the originally-filed specification. See, for example, paragraph 43 of the originally-filed specification, which states that “[f]orming the weakly-ionized or pre-ionized plasma 232 substantially eliminates the probability of establishing a breakdown condition in the chamber...”

The Applicant believes that there is no description in Koloc of a weakly-ionized plasma that reduces the probability of developing an electrical breakdown condition in the chamber. Instead, the Applicant believes that Koloc describes a source of ionizing energy that is oriented to project or focus ionizing energy into a particular region, such as a helical path. Koloc describes applying a high voltage potential between two electrodes in order to create a discharge current. The discharge current causes a buildup of magnetic energy that induces energetic image currents that explosively displaces conductive matter or ionized gas in the region. The force resulting from the explosive displacement creates an evacuated region surrounding the helical discharge current. See, for example, Col. 5, lines 5-35. The Applicant believes that the source of ionizing energy in Koloc is intended to provide a helical discharge path for the high-voltage discharge.

In view of the above remarks, the Applicant respectfully submits that Koloc does not describe each and every element of independent claim 1 as currently amended, either expressly or inherently. Therefore, the Applicant submits that Koloc does not anticipate independent claim 1 as currently amended under 35 U.S.C. §102(b). Thus, the Applicant submits that independent claim 1 as currently amended is allowable. The Applicant also submits that dependent claims 2, 4-9, and new claim 45 are allowable as depending from an allowable base claim.

#### Independent Claim 10 and Dependent Claims 11 and 13-20

The applicant respectfully submits that Koloc does not describe each and every element of independent claim 10 as currently amended. Independent claim 10 is herein amended to recite the step of ionizing a feed gas to form a weakly-ionized plasma. The weakly-ionized plasma reduces the probability of developing an electrical breakdown

condition in the chamber. This amendment is supported by the originally-filed specification of the present application. See, for example, paragraph 43 of the present specification.

As previously discussed with reference to independent claim 1, there is no description in Koloc of a weakly-ionized plasma that reduces the probability of developing an electrical breakdown condition in the chamber. Instead, the Applicant believes that Koloc describes a source of ionizing energy that is oriented to project or focus ionizing energy into a particular region.

In view of the above remarks, the Applicant respectfully submits that Koloc does not describe each and every element of independent claim 10 as currently amended, either expressly or inherently. Therefore, Applicant submits that Koloc does not anticipate independent claim 10 as currently amended under 35 U.S.C. §102(b). Thus, the Applicant submits that independent claim 10 as currently amended is allowable. The Applicant also submits that dependent claims 11 and 13-20 are allowable as depending from an allowable base claim.

Independent Claim 22 and Dependent Claims 23-27, 29-32 and 46

Independent claim 22 has been amended to include the limitations in objected-to claim 28. The Applicant respectfully submits that in view of this amendment, Koloc does not anticipate independent claim 22 as currently amended under 35 U.S.C. §102(b). Thus, the Applicant submits that independent claim 22 as currently amended is allowable. The Applicant also submits that dependent claims 23-24, 26, 31-32, and new claim 46 are allowable as depending from an allowable base claim. In addition, the Applicant submits that objected-to claims 25, 27, 29, and 30 are allowable as depending from allowable base claim 22.

Independent Claim 33 and Dependent Claims 34-41

Independent claim 33 has been amended to include the limitations of objected-to claim 42. Applicant respectfully submits that in view of this amendment, Koloc does not anticipate independent claim 33 as currently amended under 35 U.S.C. §102(b). Thus, the Applicant submits that independent claim 33 as currently amended is allowable. The Applicant also submits that dependent claims 35-37 and 41 are allowable as depending from an allowable base

claim. In addition, the Applicant submits that objected-to claims 34 and 38-40 are allowable as depending from allowable base claim 33.

#### Independent Claim 43

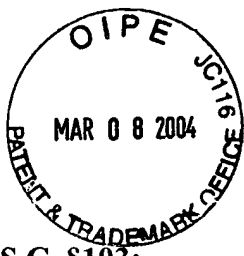
Applicant respectfully submits that Koloc does not describe each and every element of independent claim 43 as currently amended. Independent claim 43 is herein amended to recite a means for ionizing a feed gas to form a weakly-ionized plasma where the weakly-ionized plasma reduces the probability of developing an electrical breakdown condition in the chamber. This amendment is supported by the originally-filed specification of the present application.

As previously discussed with reference to independent claim 1, there is no description in Koloc of a weakly-ionized plasma that reduces the probability of developing an electrical breakdown condition in the chamber. Instead, the Applicant believes that Koloc describes a source of ionizing energy that is oriented to project or focus ionizing energy into a particular region.

In view of the above remarks, the Applicant respectfully submits that Koloc does not describe each and every element of independent claim 10 as currently amended, either expressly or inherently. Therefore, Applicant submits that Koloc does not anticipate independent claim 10 as currently amended under 35 U.S.C. §102(b). Thus, the Applicant submits that independent claim 43 as currently amended is allowable.

#### Independent Claim 44

Independent claim 44 has been amended to include the limitations in the objected-to claim 42. Applicant respectfully submits that in view of this amendment, Koloc does not anticipate independent claim 44 as currently amended under 35 U.S.C. §102(b). Thus, the Applicant submits that independent claim 44 as currently amended is allowable.



**Rejections under 35 U.S.C. §103:**

Claim 16 is rejected under 35 U.S.C. §103(a) as being unpatentable over Koloc. Dependent claim 16 has been amended to more clearly recite the invention and depends from independent claim 10. Independent claim 10 has been amended herein to recite the step of ionizing a feed gas to form a weakly-ionized plasma that reduces the probability of developing an electrical breakdown condition in the chamber. The Applicant believes that this step is neither taught nor suggested by Koloc. Therefore, the Applicant respectfully submits that dependent claim 16 is not obvious over Koloc. Thus, the Applicant believes that dependent claim 16 is allowable.

**CONCLUSION**

Claims 1-20, 22-27, 29-41, and 43-46 are currently pending in the present application. Claims 1, 3, 10, 12, 16, 22, 33, 43, and 44 are amended by the present Amendment. Claims 21, 28, and 42 are canceled without prejudice. Claims 45 and 46 are added. In view of the foregoing amendments and remarks, reconsideration and allowance of all pending claims (i.e., claims 1-20, 22-27, 29-41, and 43-46) is respectfully requested.

The Commissioner is hereby authorized to charge the extension fee, the additional claims fee, and any other proper fees to Attorney's Deposit Account No. 501211.

If, in the Examiner's opinion, a telephonic interview would expedite prosecution of the present application, the undersigned attorney would welcome the opportunity to discuss any outstanding issues, and to work with the Examiner toward placing the application in condition for allowance.

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Respectfully submitted,

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